

Notice of Allowability

Application No.

10/081,673

Examiner

Jungwon Chang

Applicant(s)

RAMANATHAN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview dated 11/17/2005.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 11/17/2005.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

CMJ Jungwon

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William J. Kramer, Reg. No. 46,229 on 11/17/2005.

2. The following title is suggested: --- An opportunistic directory cache and method of serving target directory information in a network environment ---.

3. The application has been amended as follows:

In claims

1. (Currently Amended) A method of serving target directory information, in a computing environment comprising a server computer hosting the target directory, a client computer communicably linkable to the server computer, the client computer hosting an application and a directory cache, the method comprising the steps of:

receiving from the application a benign request for information relating to a target file potentially contained in the target directory;

inspecting the directory cache to determine whether a valid enumeration of

the contents of the target directory is cached in the directory cache;

forwarding the request for information to the server if it is determined that a valid enumeration of the contents of the target directory is not cached in the directory cache;

inspecting the directory cache to determine whether a valid entry for the target file is contained in the enumeration of the contents of the target directory, if it is determined that a valid enumeration of the contents of the target directory is cached in the directory cache;

returning to the application an indication that the target file does not exist in the target directory if it is determined that a valid entry for the target file is not contained in the enumeration of the contents of the target directory; and

if it is determined that a valid entry for the target file is contained in the enumeration of the contents of the target directory, serving the request for information from the directory cache if the valid entry for the target file contains sufficient information to satisfy the request, and otherwise sending the request to the server and passing a response from the server to the application [[.]].

wherein the directory cache also contains partially valid and invalid enumeration of the contents of the target directory.

7. (Currently Amended) A method of managing a directory cache for a target directory, in a computing environment comprising a server computer hosting the target directory, a client computer communicably linkable to the server computer, the client computer hosting an application and the directory cache, the method comprising the steps of:

receiving from the application a non-benign request for information relating to a target file potentially contained in the target directory;

inspecting the directory cache to determine whether a valid enumeration of the contents of the target directory is cached in the directory cache;

forwarding the request for information to the server if it is determined that a valid enumeration of the contents of the target directory is not cached in the directory cache, and caching a server response to the request for information in the directory cache;

inspecting the directory cache to determine whether a valid entry for the target file is contained in the enumeration of the contents of the target directory, if it is determined that a valid enumeration of the contents of the target directory is cached in the directory cache;

invalidating in the directory cache the file information for all entries that begin with the same first character as the target file if it is determined that a valid entry for the target file is not contained in the enumeration of the content of the target directory; and

invalidating in the directory cache the file information for the target file if it is determined that a valid entry for the target file is contained in the enumeration of the content of the target directory [[.]].

wherein the directory cache also contains partially valid and invalid enumeration of the contents of the target directory.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-

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3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jungwon Chang
December 9, 2005